

In the claims:

1. (Currently amended) A reactor (1; 1A) for solid phase synthesis comprising a vessel having a bottom (2), a filter (3; 3A; 3B; 3C; 3D) arranged in the vessel (2) and a filtrate outlet (4) connected to the filter for evacuating at the filtrate out of the filter, and the filter being connected to the filtrate outlet (4), characterized in that it comprises means (3; 4; 3A; 3B; 3C; 3D) for delivering a gas into the vessel in a region of the vessel (2) near ~~to the bottom (24)~~ of the vessel (2) and beside the filter (3; 3A; 3B; 3C; 3D).
2. (Currently amended) The reactor (1; 1A) according to claim 1, characterized in that wherein the filter comprises a filter cartridge (3; 3A; 3B; 3C; 3D), preferably a filter candle.
3. (Currently amended) The reactor (1; 1A) according to claim 2, characterized in that wherein the filter cartridge (3; 3A; 3B; 3C; 3D) comprises has an intermediate bottom (32; 32D) that separates the filter cartridge (3; 3A; 3B; 3C; 3D) into a lower chamber (31; 31D) connected to the filtrate outlet (4) and an upper chamber (30; 30D); and a one-way valve (33; 33D) that connects the upper chamber (30; 30D) with the lower chamber (31; 31D) such that the intermediate bottom of the filter cartridge (32; 32D) is pervious in the direction from the upper chamber (30; 30D) to the lower chamber (31; 31D) but not in the direction from the lower chamber (31; 31D) to the upper chamber (30; 30D).
4. (Currently amended) The reactor (1; 1A) according to claim 3, characterized in that wherein the filtrate outlet (4) comprises a gas inlet (40; 40A) for delivering the gas into the vessel (2) through the lower chamber (31; 31D) of the filter cartridge (3; 3A; 3B; 3C; 3D).

5. (Currently amended) The Rreactor (1; 1A) according to ~~one of claims~~ claim 1 to 4, characterized in that wherein the vessel (2) comprises a plurality of filters (3; 3A; 3B; 3C; 3D).

6. (Currently amended) The Rreactor (1; 1A) according to ~~one of claims~~ claim 1 to 5, characterized in that wherein the vessel (2) comprises a double casing (20) for temperature regulation.

7. (Currently amended) The Rreactor (1; 1A) according to ~~one of claims~~ claim 1 to 6, characterized in that wherein the filter (3; 3A; 3B; 3C; 3D) or filters comprises a slotted screen filter medium.

8. (Currently amended) The Rreactor (1; 1A) according to ~~one of claims~~ 1 to 7, characterized in that wherein the vessel (2) comprises a filtrate inlet (21) connected to the filtrate outlet (4) such that the filtrate can ~~return~~ move from the filtrate outlet (4) via the filtrate inlet (21) into the vessel (2).

9. (Currently amended) The Rreactor (1; 1A) according to ~~one of claims~~ 1 to 8, characterized in that wherein the vessel (2) comprises an exhaust (22; 22A) connected to the means (3; 4; 3A; 3B; 3C; 3D) for delivering the gas such that the exhausted gas can return back into the vessel (2).

10. (Currently amended) The Rreactor (1; 1A) according to ~~one of claims~~ 1 to 9, characterized in that it comprises further comprising a cascade of vessels (2) each comprising an exhaust (22; 22A), ~~which~~ wherein each vessels (2) ~~are~~ is connected together in such a way that the exhaust (22; 22A) of one vessel (2) is connected to the means (3; 4; 3A; 3B; 3C; 3D) for delivering the gas of the following vessel (2).

11. (New) The reactor according to claim 1, wherein the filter comprises a filter candle.